Title (en)

METHOD OF DETECTING ABNORMAL SOUND IN STEERING SYSTEM, AND STEERING SYSTEM EVALUATING DEVICE

Title (de)

VERFAHREN ZUR DETEKTION VON ABNORMALEM GERÄUSCH IN LENKSYSTEM UND LENKSYSTEMBEURTEILUNGSVORRICHTUNG

Title (fr)

PROCÉDÉ DE DÉTECTION DE SON ANORMAL DANS UN SYSTÈME DE DIRECTION, ET DISPOSITIF D'ÉVALUATION DE SYSTÈME DE DIRECTION

Publication

EP 3447460 A4 20191127 (EN)

Application

EP 17785752 A 20170330

Priority

- JP 2016085437 A 20160421
- JP 2017013227 W 20170330

Abstract (en)

[origin: US2018120264A1] An abnormal noise detection method of a steering system is configured to detect an abnormal noise from the steering system. The steering system includes a column shaft configured to rotatably support a steering wheel and is configured to steer a wheel in response to rotations of the column shaft. The method includes measuring a sound from an end portion of the column shaft on a steering wheel-side by using a microphone arranged to face the end portion of the column shaft, and generating an abnormal noise detection signal due to the steering system from a sound signal to be output from the microphone.

IPC 8 full level

G01H 3/00 (2006.01); **B62D 5/04** (2006.01); **G01M 17/007** (2006.01); **G01N 29/04** (2006.01)

CPC (source: EP KR US)

B62D 5/0481 (2013.01 - KR); **G01H 1/003** (2013.01 - EP KR US); **G01M 17/007** (2013.01 - US); **G01M 17/06** (2013.01 - EP KR US); **G01N 29/045** (2013.01 - EP); **G01N 29/14** (2013.01 - EP US); **G01N 29/42** (2013.01 - EP US); **G01N 29/46** (2013.01 - EP US); B62D 5/0481 (2013.01 - US); G01N 2291/014 (2013.01 - US); G01N 2291/101 (2013.01 - EP); G01N 2291/102 (2013.01 - EP)

Citation (search report)

- [Y] JP 2006153729 A 20060615 - SHOWA CORP
- [Y] CN 105466552 A 20160406 - NANJING DONGHUA AUTOMOTIVE STEERING CO LTD
- [Y] FR 3011328 A1 20150403 - PEUGEOT CITROEN AUTOMOBILES SA [FR]
- See references of WO 2017183410A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 10634647 B2 20200428; **US 2018120264 A1 20180503**; BR 112018015685 A2 20181226; CN 108700454 A 20181023; EP 3447460 A1 20190227; EP 3447460 A4 20191127; JP 2018036269 A 20180308; JP 6225368 B1 20171108; JP 6879157 B2 20210602; JP WO2017183410 A1 20180426; KR 20180134840 A 20181219; WO 2017183410 A1 20171026

DOCDB simple family (application)

US 201715573735 A 20170330; BR 112018015685 A 20170330; CN 201780012028 A 20170330; EP 17785752 A 20170330; JP 2017013227 W 20170330; JP 2017193511 A 20171003; JP 2017538742 A 20170330; KR 20187021399 A 20170330